

REMARKS

Claims 1-11 and 15-20 have been rejected. Claims 12-14 have been objected to. Claims 1 and 11 have been amended solely to further the prosecution of the application.

Claims 1-11 and 15-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Taylor. Although applicant believes that certain patentable distinctions exist between the claims 1 and 11 prior to amendment and Taylor, claims 1 and 11 have been amended to clarify the scope of protection sought.

Claim 1 is directed to a system for monitoring defects in a structure. The system includes, among other features, “a power supply for supplying a direct current to a monitoring area of the structure and a reference” and “a processor having a multi-channel interface for simultaneously receiving potential drops”. The processor “is adapted to directly measure the effects of defects in the structure through a determination of a ratio of the monitoring area potential drop to the reference potential drop indicative of a percentage change in a thickness of the structure”. Claims 2-10 depend from claim 1.

Claim 11 is directed to a method for monitoring defects in a structure. The method includes, among other features, “supplying a direct current to a monitoring area of the structure and a reference” and “directly measuring the effects of defects in the structure by determining a ratio of the monitoring area potential drop to the reference potential drop indicative of a percentage change in a thickness of the structure”. Claims 15 and 16-20 depend from claim 11.

Taylor refers to an electrochemical prediction of corrosion susceptibility. Specifically, as stated in the Abstract of Taylor, an electrochemical apparatus and testing procedure “are described for predicting the susceptibility of certain zirconium-base alloys to nodular corrosion in boiling water reactor environments.” Further, Taylor describes controlling a d-c power supply 17 to provide a step decrease to a lower value of d-c current. “The effect of this step-change on the d-c cell voltage is one of the parameters providing information on the susceptibility of the alloy body to nodular corrosion” (Column 4, lines 63-65).

Taylor fails to teach or suggest either a processor “adapted to directly measure the effects of defects in the structure ...” as recited in claim 1 or “directly measuring the effects of defects in the structure ...” as recited in claim 11. Instead, Taylor describes an apparatus and a methodology for predicting the susceptibility of certain alloys to corrosion.

Claims 12-14 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations from the base and any intervening claims.

Claims 12-14 depend from claim 11. Applicant submits that, for at least the reasons provided above, claim 11 is patentable over Taylor, and thus, claims 12-14 also are patentable over Taylor.

For at least the aforementioned reasons, applicant respectfully requests withdrawal of the rejection and objection and allowance of claims 1-20. Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact applicant’s undersigned representative at the telephone number below.

Respectfully submitted,

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